

Airspace Infringements: review and actions process

CAP1404



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CAP1404 Introduction

Introduction

An airspace infringement (AI) is the unauthorised entry of an aircraft into notified airspace. This includes controlled airspace, prohibited and restricted airspace, active danger areas, aerodrome traffic zones, radio mandatory zones and transponder mandatory zones.

Al are reportable occurrences under Regulation Number (UK) 376/2014 and Implementing Regulation (UK) 2015/1018. The CAA receives over 1,000 Mandatory Occurrence Report (MOR) and Alleged Breaches of Air Navigation Legislation (ABANL) relating to airspace infringements per annum.

The Civil Aviation Authority (CAA) recognises the level of complexity of UK airspace and understands that there are many causal factors as to why an airspace infringement may occur; however, every infringement has the possibility to cause a significant risk to the safety of aircraft. Under Section 3 of the Civil Aviation Act 1982 the safety of air navigation and aircraft are statutory functions of the CAA which are intended to keep pilots and the general public safe. The CAA has an obligation to minimise the possibility of an infringement occurring, and for all parties to learn from previous events.

The reviews into those reports result in, on average, 69% of pilots receiving bespoke educational material, 22% undertaking some computer-based training (online tutorial or AIAC), 7% undertaking additional flight training On average 2% of pilots may become subject to temporary Provisional Suspension of their licence due to the severity of the occurrence, recent infringement record or if the CAA cannot verify that the pilot meets the requirements to hold a licence or is not satisfied that the pilot has the skills, knowledge or competence to fly; less than 0.4% of infringements result in prosecution, and less than 0.025% result in full licence suspension/revocation. Only approximately 5% of those having infringed then re-infringe, demonstrating the value of the Just Culture process.

Working within a Just Culture

The CAA promotes a Just Culture, in which people are treated fairly and are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training. The aim of a Just Culture is to promote continuous learning from previous mistakes and to encourage pilots to share essential safety related information openly and freely.

Civil aviation safety is sustained by a culture which fosters and facilitates the reporting of occurrences and advances the principles of a Just Culture. The CAA recognises that Just Culture is an essential element of a broader safety culture, which forms the basis of a robust safety management system. The CAA embraces safety culture principles, including Just Culture, and notes that outcomes from this and similar processes result, in most cases, in purely educational or training activities. However, to maintain or improve aviation safety in cases of, for example, gross negligence, wilful violations and destructive acts, further action **may** be necessary.

When addressing safety-related issues within a Just Culture, it is vital that investigations and decisions are fair and timely and that all reasonable efforts are made by the CAA to decide upon remedial actions **without delay**.

Commensurate with that principle:

- the CAA will advise the pilot of all details which will be considered. If the pilot requires a copy of the material, they will be advised how to request the information from 3rd parties and to submit an SRG1605 for a copy of the occurrence report;
- the pilot may comment on such material and is invited to submit additional information where it has become available;
- the CAA will clearly communicate to the pilot the rationale for the decision, including material relied upon;
- any remedial actions notified in the decision will be underpinned by the same principle of 'without delay';
- timescales for response to CAA requests for additional information will be clearly shown in relevant correspondence; and,
- Where the CAA has made a substantive decision on a pilot's licence, we will notify the affected pilot of their entitlement to have the decision reviewed in accordance with Regulation 6 of the Civil Aviation Regulations 1991. Details can be found at: General Appeals Process - Section 6 of CAP393

Why is CAP1404 needed?

The aim of CAP1404 is to clearly outline how the CAA deals with an AI report and make it transparent to those who are going through, or may go through, the process.

There are many reasons as to why an AI may occur and work to understand these causes are researched by the CAA every year. The reasons behind, and the severity of, an AI sits on a scale and there is no single solution to cover each infringement; that is why there are numerous outcomes to an AI being reported - from no action, through to the request for further training and, in extreme cases, provisional suspension of a licence. With a Just Culture in place, each outcome aims to enhance the knowledge and capability of the pilot and/or to ensure both the pilot and the public are kept safe.

The purpose of the CAA's Al review and actions process is to improve safety by ensuring that reported infringements are reviewed and assessed in a consistent way and, if an infringement is found to have occurred, to identify appropriate remedial actions to prevent reoccurrence and enable the pilot to improve their knowledge and skills to enable safer flying.

CAA Regulatory Safety Management System (RSMS)

The CAA Regulatory Safety Management System (RSMS) incorporates safety assurance and audit functions to provide assurance to the CAA Board that our activities are being carried out as we would expect them to be. We want to know if our SMS is working, what areas we are doing well, what areas need to be improved and, most importantly, that we are identifying and dealing with the right things with regard to aviation safety risks faced by the UK public. Infringement Coordination Group (ICG) activity is subject to these processes and the CAA annual report will include details of any metrics and changes relating to airspace infringement activity.

Airspace infringement reporting

The CAA receives reports of AI from several sources, primarily air navigation service providers (**ANSP**s), such as the controlling authority for the airspace in question. Following a reported infringement, one of two complementary courses of action may be followed:

Report submission - The reporter submits a Mandatory Occurrence Report (**MOR**) to the CAA, detailing the apparent infringement. Separately, and in extremis, where the reporter deems the circumstances dictate, it may also decide to submit a CA939 or 'Alleged Breach of Air Navigation Legislation (ABANL)' report to the CAA's Investigations and Enforcement Team.

ANSP procedures - An ANSP's safety management system will often include its own investigation and follow-up procedure. This may include requesting the pilot of the reported aircraft to complete a questionnaire as part of a two-way learning exercise. The information obtained from the questionnaire is shared with the CAA. The questionnaire serves to understand the pilot's side of the event, and to help identify trends in causal factors that may aid others in preventing infringement. It also helps to identify, where appropriate, training or interventions that may be required to prevent a re-occurrence.

CAP1404 Pilot reporting

Pilot reporting

Occurrence reporting in the UK is governed by law and promotes Just Culture principles. The purpose of occurrence reporting is to allow the aviation community to learn from events and reduce the probability of reoccurrence.

Pilots of UK Part 21 aircraft are required to submit a Mandatory Occurrence Report (MOR) following an airspace infringement.

For aircraft that are classified as UK Non-Part 21 occurrence reporting remains voluntary. However, pilots are strongly encouraged to submit an MOR (or complete the questionnaire) to enable the CAA to carry out a full, independent review of the event and to understand if future infringements similar to the reported occurrence could be prevented. The MOR allows the reporter to share their account, including causal and contributory factors.

The online questionnaire can be accessed at

https://airspacesafety.com/infringement/infringement-form/. Pilots are encouraged to provide as much information as possible. Both the MOR and pilot infringement questionnaire provide valuable insight into the reasons why an infringement happened and helps us make informed decisions to protect all airspace users in the future.

CAP1404 Infringement review

Infringement review

All reports of airspace infringements received by the CAA are initially reviewed and evaluated according to Causal factors and:

- Safety impact (e.g. loss of separation, activation of ground/airborne collision avoidance tools, avoiding action turns given by air traffic control to aircraft under their control);
- 2. Applied safety intervention measures (e.g. departing aircraft held on the runway, arriving aircraft vectored from their planned track or delayed in holding patterns) as a safety barrier to prevent a mid-air collision or loss of separation;
- 3. Previous infringement(s) by the pilot. A previous infringement will only be considered relevant if the related CAA decision on education/retraining requirements for that previous event sits within a period of 2 years of the reported date of the current event.

Infringement Co-ordination Group (ICG)

A reported infringement which displays any number of the preceding 3 characteristics is referred to the CAA ICG.

The ICG is a multi-disciplinary team from across the CAA, comprising staff from the General Aviation Unit (GAU), the Investigations and Enforcement Team, Airspace Regulation, Air Traffic Management and Aerodromes (AAA), Pilot Licensing Policy, Safety Performance & Risk and Flight Operations. It also includes representation from the MoD's aviation regulator, the Military Aviation Authority (MAA).

The ICG reviews reported Als using all available material, including information submitted by the airspace controlling authority, information submitted by the pilot and any previous relevant records held by the CAA. The ICG assesses the severity of the incident and determines what, if any, remedial measures are appropriate and proportionate to prevent a recurrence.

A flow chart outlining the process is at Annex 1.

CAP1404 Evaluation considerations

Evaluation considerations

- Can the ICG confirm an infringement actually occurred?
- Was radar separation lost?
- What, if any, safety implementation measures were applied, e.g. avoiding action issued, aircraft broken-off approach, aircraft instructed to enter a hold or aircraft departures stopped on the ground?
- What were the airspace structures and complexity?
- What were the prevailing flight conditions and forecast meteorology conditions?
- What pre-flight planning did the pilot do?
- Was a transponder installed, was it used and was Mode C selected?
- Did the pilot use a Frequency Monitoring Code and, if so, did they respond to radio calls?
- Did the pilot ask for help?
- Did the pilot use a VFR Moving Map?
- What licence and ratings does the pilot hold?
- What was the pilot's level of experience?
- Has the pilot infringed airspace before (see page 9, point 3)?
- Does the incident suggest that the pilot's skills and knowledge are deficient?
- What is the pilot's attitude towards and understanding of the event?
- Has the pilot subsequently undertaken any remedial training?
- Any other relevant circumstances not listed above

CAP1404 Infringement scale

Infringement scale

Having assessed the circumstances of the reported infringement and the consequences, if any, the ICG determines if an infringement occurred. If it confirms the case, they will then consider what actions, if any, are appropriate and proportionate.

Minor infringement

For example, an Al which did not compromise flight safety or require the implementation of safety intervention measures, or where the pilot has not previously infringed.

Intermediate infringement

For example, an AI which did not compromise flight safety, but where the pilot has previously infringed (see page 9, point 3), or an airspace infringement which required the implementation of safety intervention measures.

Major infringement

For example, an AI that compromised flight safety or the pilot has previously infringed on more than one occasion (see page 9, point 3).

CAP1404 Remedial actions available

Remedial actions available

Overview

The ICG determines which action(s) is/are proportionate to facilitate the appropriate level of education and/or re-training to avoid recurrence. There are a number of potential outcomes available which can be used where it is deemed appropriate. ALL outcomes will be assessed in light of extenuating circumstances. The following example outcomes are representational but are not limited:

- closure letter with education material or pilot required to:
- undertake the online tutorial and pass the associated test or;
- attend the Airspace Infringements Awareness Course or;
- undertake remedial training at a training organisation as may be determined by the CAA Flight Examiner member of the ICG

Successful completion of a remedial measure will usually conclude the process unless the pilot is subject to other action by the CAA. The remedial measure and outcome will be recorded on the pilot's CAA licence.

If a pilot fails to successfully complete or declines to participate in any of the measures recommended or required of them, the ICG will review the case and decide on which, if any, further remedial measure or licensing action is appropriate. Licensing actions include provisional suspension, suspension, limitation or revocation of a pilot's licence.

At any time, a pilot may request to discuss the process with the CAA's Airspace Infringement Team to gain a detailed understanding of the infringement and the ICG's decision-making process. A request can be made to mor.responses@caa.co.uk

Online tutorial and test

The online tutorial contains knowledge expected of a competent pilot; it aims to refresh and then test understanding of core knowledge and airmanship. Pilots will be provided with log-in details. The tutorial can be viewed at. http://infringements.caa.co.uk/.

The test comprises 20 questions to be completed in 20 minutes. The questions are drawn from information included in the online tutorial, the wider Airspace and Safety Initiative website, and basic airspace and aviation knowledge required to obtain a flight crew licence.

A full report on the questions asked and test results will be made available to the pilot at the time of completing the test.

CAP1404 Remedial actions available

Airspace Infringements Awareness Course (AIAC)

The AIAC is a half-day course run by CAA-approved organisations and delivered by video conferencing. The course is designed to support the pilot in learning how and why the infringement happened and highlights skills and training that prevent reoccurrence. Successful completion of the course entails: provision of required identification to the course provider; timely arrival; completion of each programmed element; full participation. Pilots are required to cover the cost of their attendance.

Refresher Training at a Pilot Training Organisation

A minimum number of hours of refresher training will be prescribed and must be completed at a pilot training organisation. Training may be flight training, theoretical training or a combination of both. Completion of the training must be documented by the relevant Head of Training or Chief Flying Instructor where the training was completed, with written confirmation of the topics covered and time spent on each topic provided to the CAA. A record of the training should also be retained by the pilot training organisation and may be subject to audit or inspection. The CAA may specify where the training is to be undertaken in order that the pilot obtains maximum benefit from the training. Refresher training is conducted at the pilot's expense.

Flight Instructor or Flight Examiner Assessment of Competence (AoC)

When the ICG determine that the root cause or contributory factors of the occurrence/occurrences are underpinned by the actions or inactions of the pilot in the capacity of Flight Instructor or Flight Examiner, the CAA Flight Examiner members of the ICG may determine that the Instructor or Examiner is to complete an AoC. The AoC may be carried out by a CAA Staff Examiner or Senior Examiner allocated by the CAA.

Provisional suspension of a pilot's licence

The CAA is authorised under Article 254 of the Air Navigation Order 2016 to provisionally suspend a licence that it has issued. A provisional suspension is not a substantive decision of the CAA, it is a preliminary step taken whilst we are considering what, if any, further action is required before a substantive decision can be made.

The CAA may, and sometimes must, provisionally suspend a pilot's licence or associated certificates or ratings such as a Flight Instructor or Flight Examiner certificate if it cannot verify that the pilot meets the requirements to hold a licence or is not satisfied that the pilot has the skills, knowledge or competence to fly. The ICG may propose a provisional suspension of a pilot's licence at any point in the process and a decision whether to provisionally suspend will be made by the CAA's Head of AAA or nominated deputy. A pilot will be informed of a provisional suspension in writing and by telephone.

Normally, pilot licences will be provisionally suspended when a pilot declines to undertake a remedial measure or fails a remedial measure.

CAP1404 Remedial actions available

A provisional suspension means that the pilot cannot exercise the privileges of their flight crew licence. The pilot will not lose the benefits of being a current licence holder if required remedial action is completed within a specified timescale. The provisional suspension will usually be removed when the pilot has successfully completed the prescribed remedial measures; this may not be the case if the pilot is subject to a criminal investigation by the CAA.

Where a pilot fails to complete the required remedial measures within 6 months of the date of a provisional suspension the case will be referred to the Technical Lead, Flight Operations, within Shared Service Centre, CAA. As this point, the pilot's licence may be Substantively suspended at which time a final deadline will be given in which the training must be completed. If the pilot then fails to complete the training their licence will be revoked.

- Substantive suspension. The pilot will not lose the benefits of being a current licence holder if required remedial action is completed within a specified timescale.
- Revocation of a licence. The pilot will lose, forever, all technical qualifications and examination credits. If they wish to obtain a UK licence post-revocation, they will have to complete all the requirements of a first-time licence applicant.

Pilots may request to have the decision to provisionally suspend their licence reviewed by a senior CAA employee with the technical skills required to conduct such a case review. Case review applications should be made to mor.responses@caa.co.uk within 14 days of receiving notification from CAA of the provisional suspension. The case reviewer will contact both the Head of AAA (or his nominated deputy) and pilot concerned as to the outcome by both letter and telephone as soon as the review is complete. In these cases, we aim to achieve this within 21 days of receipt of the request to review but will advise on progress otherwise.

Referral for investigation

The ICG may refer an Alleged Breach of Air Navigation Legislation report of intermediate or major severity to the Investigations and Enforcement Team within the CAA for a criminal investigation.

CAP1404 Lessons identified

Lessons identified

Lessons identified will be shared with the subject pilot.

Lessons identified will be anonymised and shared with Local Airspace Infringement Teams (LAIT) and the Airspace Infringement Challenge Group (AI CG). The Questionnaire previously referenced may also be used to inform LAIT and the AI CG of causal and human factors in addition to significant trends.

There are 11 LAITs established at major infringement locations who meet on a quarterly cycle to discuss and implement local measures to reduce airspace infringements. LAIT membership comprises representatives from the airport and ANSP, the CAA, GASCo, airlines, local aerodromes and local flying schools and flying groups. The 11 LAITS are:

- Channel Islands LAIT,
- Gatwick LAIT,
- London LAIT (for Heathrow and London City Airports),
- Luton LAIT,
- Midlands LAIT (for Birmingham and East Midlands Airports),
- Northern Ireland LAIT (for Belfast International and Belfast City Airports),
- Northwest LAIT (for Barton and Hawarden Aerodromes and Liverpool and Manchester Airports),
- Oxfordshire LAIT (for RAF Brize Norton and Oxford Airport)
- Stansted LAIT,
- Wessex LAIT (for Bournemouth, Farnborough and Southampton Airports), and
- Yorkshire and Humberside LAIT (for Humberside and Leeds Bradford Airports).

The AI CG is a cross-industry group comprising representatives from the main GA associations, the CAA, ANSP, GASCo, airport bodies, LAIT and the MOD. This Group meets biannually and develops and implements a national strategy to reduce airspace infringements.

The CAA publishes data on the <u>Airspace and Safety Initiative</u> website (airspacesafety.com) showing the following anonymised statistical data:

- Monthly outcomes / decisions taken by the ICG by.
 - Closure letters sent.
 - Online tests taken,
 - Airspace Infringement Awareness Courses completed.

CAP1404 Lessons identified

- o Refresher training completed at a pilot training organisation.
- o Provisional suspensions of licences.
- Monthly statistics of reported infringements broken down by airspace type.

 An annual analysis of Causal Factors (written independently by members of the AICG)

